

DOMINIC M. ZARRO

Over 20 years experience in Solar Physics research, analyzing ground- and space-based observations. Research interests include coronal heating, solar flares and coronal mass ejections. Extensive experience with writing Interactive Data Language (IDL) software for image processing and spectral analysis, and developing Web programming applications.

MAJOR AREAS OF PERFORMANCE

Solar Flare Physics
Scientific and Technical Management
Software Development and Web Design
Data archiving and distribution

2006 to Present **ADNET Systems, Inc.**
Group Manager

Group manager for Solar System Exploration tasks on SESDA-II contract. Responsibilities include staffing, budgeting, and providing scientific and technical support.

2001 to 2006 **L-3Com/Government Services, Inc. (formerly EER Systems, Inc. & Analytics Corp.)**
Lead Support Scientist

Group manager for Solar Physics tasks on SESDA contract at NASA/GSFC. Created archive of ancillary solar flare observations to support *RHESSI* mission and Max Millennium campaigns. Produced IDL object oriented software tool to co-register images from different spacecraft and ground-based observatories. Developed IDL socket library to facilitate remote data access.

1997 to 2001 **Steven Myers and Associates/Emergent Information Technologies, Inc. (formerly Space Applications Corp.)**
Senior Scientist

Provided scientific support to the CDS and SUMER instruments on the NASA/ESA *SOHO* mission. Performed real-time observations and data analysis. Developed planning and data analysis software, and designed *SOHO* Synoptic Archive to access ground- and space-based datasets. Participated in writing winning technical proposal for Space and Earth Sciences Data Analysis (SESDA) contract.

1985 to 1997 **Applied Research Corporation (purchased by Space Applications Corp.)**
Associate Scientist

Member of US Principal Investigator team for CDS and SUMER instruments on the *Solar and Heliospheric Observatory (SOHO)* mission: wrote significant portions of software for timeline scheduling, experiment definition and planning; constructed Web pages and software for accessing joint observation catalogs. *Compton Gamma Ray Observatory (CGRO)* Guest Investigator: analyzed BATSE solar flare hard X-ray observations. Manager for Solar Data Analysis Center (SDAC) contract: analyzed space-based Solar observations (*Solar Maximum*

Mission, Yohkoh, GOES); developed data analysis software and graphical user interfaces; ported software to multi-platform environments (UNIX, VMS, Windows).

1983 to 1985 **CALIFORNIA INSTITUTE OF TECHNOLOGY**
Postdoctoral Research Fellow

EDUCATION

Australian National University
Ph.D Astronomy, 1983
University of Sydney, Australia
B.S. Applied Math. (Hons), 1979

LANGUAGES/SYSTEMS

Interactive Data Language (IDL)
Javascript, PERL, CGI, FORTRAN
HTML, TeX/LaTeX, Word, Excel
UNIX, Windows

PROFESSIONAL ACTIVITIES

- **NASA/GSFC Group Achievement Award for *Ramaty High Energy Solar Spectroscopic Imager (RHESSI)* Data Analysis Team, August 2004.**
- Co-Investigator on *RHESSI* mission, December 2002 to present.
- Member of IAU working group on Distribution of Solar Data, August 2000 to 2002.
- NASA/GSFC Group Achievement Award for *RHESSI* Imaging Hardware Team, August 2000.
- NASA/GSFC Group Achievement Award for organization of *ISTP* Coordinated Data Analysis Workshop, April 2000.
- Associate Investigator on *SMEX High Energy Solar Spectroscopic Imager (HESSI)* mission, June 1998 to present.
- Space Applications Corporation, ARD Employee of the Year Award, December 1997.
- Associate Editor of *Geophysical Research Letters*, 1997 - 2001
- Member of Scientific Organizing Committee and Group Leader for *Yohkoh/SOHO* Coordinated Data Analysis Workshops (*CDAWs*) held at NASA/GSFC, March 1997, MEDOC/Paris, October 1997, and ISAS/Japan, April 1998.
- Principal Investigator on *Compton Gamma Ray Observatory* Guest Investigator Grants (Phases 2, 3, 4, and 5), 1994 to 1997.

PROFESSIONAL ORGANIZATIONS

- International Astronomical Union (IAU) Commission 12.

- American Astronomical Society (AAS).
- Solar Physics Division (SPD) of AAS.